Achieving an Agile Enterprise with Enterprise-Wide Portfolio and Lifecycle Management
This white paper explains the challenges of managing large application portfolios, from defining strategy to implementing features. And it shows how these challenges can be met by introducing an enterprise-wide framework that integrates with existing tools to manage the complete lifecycle of each application and provide continuous visibility of all applications to all stakeholders across the organization.

Executive Summary

Today, business success requires getting good ideas to the market quickly. And for many companies that means turning them into software and delivering it faster than ever without sacrificing quality. But modern software systems—and the organizations that deliver them—are complex and riddled with interdependencies. To become an agile enterprise, enterprise architects, portfolio managers, and other executives must gain insight into the status of each application in their portfolio, so they can make effective resource and investment decisions. And when a business decision is made, it must be pushed down into the application teams for implementation and tracked across its lifecycle, from its origins in strategy, through development, and into deployment and production.

But each team is unique. Each may choose its own development methodology, application lifecycle management tools, and metrics to track. Some are moving to DevOps to increase agility. As a result, the information that feeds business decisions is difficult to obtain and is inconsistent across teams. In addition to tracking the status and progress of each team and application, executives need to aggregate metrics from disparate tools into a single, consistent view that lets them make better business decisions and track the progress of decisions as they are carried out by the application teams.

This white paper explains the challenges of managing large application portfolios, from defining strategy to implementing features. And it shows how these challenges can be met by introducing an enterprise-wide framework that integrates with existing tools to manage the complete lifecycle of each application and provide continuous visibility of all applications to all stakeholders across the organization.

Today’s Enterprise—Driven to Change

A business climate driven by change and disruption is having a major impact on the way organizations develop and deliver software. Here are some of the drivers affecting software organizations.

Business Agility

Businesses feel increased pressure to release software faster to stay competitive and meet rapidly evolving customer expectations. This drives teams to become more agile and adopt DevOps practices to help them deliver functionality more frequently. As they struggle to achieve increasingly aggressive time to market, they also grapple with prioritizing business and customer demands across multiple applications and portfolios. Executives must be able to consistently monitor the output and quality of the teams that are becoming more agile, as well as that of legacy teams.
Complexity

Migration from monolithic architectures to containerized microservices, the sheer number of applications themselves, and the global increase in mobile devices and new form factors are compounding the number of touch points and interdependencies among different parts of the portfolio. While teams working on each application typically use the same tools to develop it and manage its lifecycle, teams working on other applications may use different tools and processes.

For example, a modern application might be developed using agile development practices. However, the application might be dependent on some functionality from a legacy application that is developed using waterfall techniques. And the legacy application itself might be gradually adapting to new devices like smartphones and smart watches and implementing architectures like microservices with delivery mechanisms such as containers. Managers require constant visibility into multiple development pipelines across multiple teams and applications that may use different methodologies and tools.

Demand for Cloud Scalability

Rather than reinventing the wheel and developing services in-house, organizations are turning to the cloud for their service composition, and they are consuming software via the cloud. The cloud is essential to reducing costs as teams grow, increasing operational efficiency, and optimizing license consumption.

The cloud adds another dimension to planning and providing the application portfolio, but cloud-based software as a service (SaaS) solutions for application lifecycle and portfolio management provide the purchasing and provisioning flexibility you need when you need to move fast. Cloud providers offer superior disaster recovery capabilities, and they conform to the security and data privacy standards that most organizations require.

Challenges for Software Development Executives

Everyone in the organization is affected by the journey to enterprise agility. Developers and testers, product owners, and release managers all need to learn how to be more agile.

Those making strategic decisions, whether at the portfolio level, such as portfolio managers, or at the enterprise level, such as enterprise architects and the CIO, need accurate information from the different teams in the organization. And they need a consistent set of information whether teams use agile, waterfall, or a hybrid development model.
To act on strategic decisions, development teams must be able to see the product roadmap and to plan how to prioritize features and user stories based on business demands. As they work on their tasks, they must be able to easily report status and progress to executives without being diverted from their primary task of developing software.

Without an effective and complete management process, applications may be built and delivered, but actual business value might not be managed or measured. Ultimately, the business will see higher costs and limited return on investment (ROI) and will question the overall value and credibility of the IT organization.

To deliver the value the business needs, managers and executives across the organization must answer questions like:

- What is the cost and value of our current applications?
- What application projects are we currently investing in?
- How much are we investing in new initiatives vs. maintenance projects?
- Are we focused on the right business priorities throughout the application lifecycle? What new projects can we commit to this year?
- Can we free up resources to take on an urgent new project and urgent tasks?
- Is our investment optimized across the portfolio?
- How many defects and application lifecycles are we working on at a time?
- How do I manage the multiple vendors working in my application development?
- What are the risks along the application lifecycle, especially in a cloud environment?
- Which applications should be made to work on mobile devices?

This white paper won’t answer these questions for you. But we can help you answer them for yourself.

Meeting the Challenges—Enterprise Portfolio and Lifecycle Management

A key component of enterprise agility is the business justification and aggregation of all potential investments that could be made by the organization. Input to this process includes all new ideas and demands as well as potential investments to enhance existing applications. To be successful, this process requires portfolio prioritization that extends through the development cycle, service and security policies, delivery, production monitoring, and change management and retirement.

To achieve this, the organization needs a consistent management methodology and toolset that enables executives to make strategic decisions and communicate that strategy to each group without disrupting their work. And senior managers must be able to monitor status without forcing the groups to introduce new processes they perceive as unnecessary or even obstructive.
But wholesale replacement of existing tools and processes is usually not practical. It could take months or years to fully reproduce the efficiency of the original tool, which may have been customized to the needs of individual teams. Users must be retrained. Data about teams, timelines, and resources must be migrated. And any customizations required, such as workflow, must be applied to the new tool to support the team’s processes. Automated tests written for the original testing tool will probably be incompatible with the new testing tool and must be rewritten and tested. The new tool must be tested to make sure it works, and any bugs must be ironed out before the new system is used in production. If the team wants to apply predictive analytics based on prior work, historical data must also be migrated. All of this must be carried out in parallel to the team’s regular workload in order not to interrupt their flow of work.

Rather than replace existing tools, new tools should work with them. For example, a portfolio management system must integrate with existing lifecycle management tools. This will allow strategic backlog items to be automatically communicated to each of the existing lifecycle management tools, while capturing status and progress from them. And it should present the information from all of the different products and portfolios in a single, consistent view.

Such an enterprise-wide system must provide:

- Resource management
- Portfolio management
- Budget management
- Seamless integration with tools and processes used by different parts of the organization
- Insight and predictive analytics to make strategic course corrections to achieve the business goals

Further, organizations have different ways of categorizing the applications within their portfolios. For example, some applications might be considered “legacy,” while others are considered “new.” So an effective portfolio management tool must allow the executives to view the different groupings of applications and to group collective quantitative data such as ROI, market share, and net promoter scores in the same way.

Consider an organization with two portfolios: Portfolio A, with three legacy applications and one new application, and Portfolio B, with two legacy applications and two new applications. To make strategic decisions, executives must consider the applications in the context of each portfolio. Looking at each portfolio individually, there are four applications each. But for certain decisions, such as “How much do we want to invest in legacy applications in the next 12 months?” they must be able to view new and legacy applications across portfolios. In this case, there is a group of five legacy applications, and a group of three new applications.

This ability to slice and dice the data allows executives to optimize the resource and budget allocation more predictably.
Benefits of an Enterprise-Wide Enterprise Planning Solution

An enterprise-wide planning solution allows CIOs and project managers to gain a clear and consistent view across the enterprise, while giving portfolio managers visibility into their entire portfolio. The system becomes a single source of record for the organization as it transforms to an agile enterprise.

As strategic initiatives are rolled out across the enterprise, the development teams can continue to use their preferred toolsets, because the data produced and managed by these toolsets flows upwards to the enterprise layers. This allows initiatives to be tracked in real time, against real data, enabling in-flight course corrections that are communicated consistently throughout the whole organization.

Micro Focus Agile Enterprise Solutions

Micro Focus® Agile Enterprise solutions integrate with existing tools to provide organizations the single consistent view and two-way communications needed for comprehensive and effective enterprise-wide portfolio and lifecycle management. The solution comprises Micro Focus Project and Portfolio Management software (Micro Focus PPM) and Micro Focus Application Lifecycle Management Octane software (Micro Focus ALM Octane). Micro Focus PPM and ALM Octane integrate with existing tools to provide organizations the single consistent view and two-way communications needed for comprehensive and effective enterprise-wide portfolio and lifecycle management. The solution comprises Micro Focus Project and Portfolio Management software (Micro Focus PPM) and Micro Focus Application Lifecycle Management Octane software (Micro Focus ALM Octane). In addition, integrations with Micro Focus tools allow you to connect PPM and ALM Octane to the lifecycle management tools you already use to provide full visibility into and control across your complete application development landscape.

Micro Focus Project and Portfolio Management (PPM)

PPM software provides portfolio managers and executives visibility into strategic and operational demand as well as the ongoing projects across your organization. The application portfolio management module feeds detailed application assessment data into this process, while project and program management capabilities provide real-time visibility into the project lifecycle at the portfolio, program, resource, financial, and project level. This provides the flexibility and transparency needed in today’s challenging economic conditions.

Micro Focus ALM Octane

ALM Octane is a comprehensive lifecycle management solution that enhances the speed, quality, and scale of software delivery for organizations adopting lean, Agile, and DevOps delivery practices. It helps application development teams deliver applications quickly without compromising quality or digital user experience. ALM Octane immediately adds value on top of widely adopted open source developer and collaboration tools to give you a clear and accurate view of quality and release readiness against the metrics that matter most to business. Additionally, Micro Focus Predictive Analytics learns from previous project data to unlock insights hidden in your application’s dark data, decreasing risk and optimizing the delivery of quality applications.

Learn more at
www.microfocus.com/ppm
www.microfocus.com/alm-octane